DATE OF PUBLICATION AND AUTHORSHIP OF THE FISH NAMES IN EYDOUX & SOULEYET'S ZOOLOGY OF *LA BONITE,* 1841 - 1852

by

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ABSTRACT.– The authors attribute to Eydoux & Souleyet the descriptions of new species published in the *Voyage de la Bonite* (with the exception of *Conger marginatus,* attributed to Valenciennes). Discovery of a reference in the text to a work published in 1847 led to a critical reappraisal of the traditional dating of the section on fishes (volume 1, part 2, usually given as 1841 or 1842) and the conclusion that it may have been published as late as 1850. Since other names published in the period 1841-1850 may now have priority, the dates of the parts of Temminck & Schlegel's *Fauna japonica* and of some works by Richardson are tabulated. A complete list of the 32 species described by Eydoux & Souleyet (of which 22 were new) is given in an appendix, with notes on extant specimens in the Muséum National d'Histoire Naturelle (of which 18 are types).

RESUME.– Les auteurs attribuent à Eydoux et Souleyet les descriptions d'espèces nouvelles de poissons publiées dans le *Voyage de la Bonite,* à l'exception de *Conger marginatus,* attribuée à Valenciennes.

Une confrontation critique du texte de la Bonite et des publications contemporaines des ichtyologistes français conduit à modifier la date (1841 ou 1842) jusqu'alors admise pour la publication de la 2ème partie du tome 1. La publication est postérieure à 1848 et peut avoir été aussi tardive que 1850. Il en résulte que des espèces décrites par divers auteurs étrangers (les dates des publications contemporaines de Temminck et Schlegel et de Richardson sont indiquées en annexe) pourront être des synonymes senior des espèces de Eydoux et Souleyet.

Une liste complète des 32 espèces, dont 22 nouvelles, décrites dans le Voyage de la Bonite est donnée en annexe. Les types de 18 espèces ont été retrouvés.

During the 1840s a number of ichthyological works appeared, often published in parts, the authorship and exact date of which may be critical for establishing nomenclatural priorities. One such work was *Voyage autour du monde exécuté pendant les années 1836 et 1837 sur la corvette* La Bonite *commandée par M. Vaillant,* of which the zoology was ostensibly written in 1841 by the chief surgeon Joseph Fortuné Théodore Eydoux (1802-41) and his assistant François Auguste Souleyet (1811-52).

Both their names appear on the title page of 1841 but, as Souleyet states in the preface (dated November 1841), almost at the beginning of the work Eydoux

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Cybium, 1982, 6 (3) : 59-73.

was sent as chief physician to Martinique, where he died of yellow fever only a few months later, in July 1841. However, Eydoux was acknowledged as senior author and there seems no reason not to couple his name with that of Souleyet as authors of the zoology.

A different view was taken by Jordan (1919 : 213), who was under the impression that the fish descriptions and names were by Valenciennes, to whom he attributed the only new (gobiid) genus, *Oxuderces*. Eydoux and Souleyet themselves attribute "la détermination de toutes les espèces de cette classe (poissons) qui sont figurées sur nos planches" to Valenciennes (their footnote, p. 157), and in the preface Souleyet states quite plainly that "Nous devons à M. le professeur Valenciennes la détermination de nos poissons.". Nevertheless, we find good reason to attribute the names and descriptions of fishes to both Eydoux and Souleyet.

The dating of the section on fishes has also been controversial. For example it is given as 1842 by Jordan (*loc. cit.*), as 1841 in Dean's *Bibliography of fishes*, as 1842 in Neave's *Nomenclator*, and by Herre (1953) – totally confused – as both 1841 and 1842 indiscriminately, even for the two species of *Saurus*. We find evidence, however, that the fishes at least were published five or more years after this, even as late as 1850.

AUTHORSHIP

The zoological specimens from the voyage, as Souleyet states in the preface, were deposited in the Muséum d'Histoire Naturelle in Paris, presumably shortly after the ship returned since, on p. xxiv, de Blainville, in an official report on the results dated 1838 – published for the first time in *C.R. Acad. Sci.*, 6 (n° 15, 1st semestre 1838) : 445-460 (séance of 9 April 1838) – mentions the acquisiton by the Muséum of 417 specimens of about two hundred species. It must have been at this time that Valenciennes looked at the fishes and gave them names, no doubt keen to see what could be included in subsequent volumes of the *Histoire naturelle des poissons*. Eydoux and Souleyet must have shown Valenciennes their notes and colour sketches during this initial naming of fishes, but early in 1841 Eydoux was sent to Martinique "almost at the beginning of the work", thus little can have been done during the two previous years. After Eydoux' death, Souleyet was given sole charge of the zoology (Petit, 1853). For the next five years Souleyet was apparently in Paris, but tours of overseas duty took him away in 1846 and he returned to Paris only in January 1850 (Appel, 1975). Since there is firm evidence (see below) that the section on fishes was not published in the years before his departure, it is possible that his fish (and other) descriptions were not complete before he left Paris. His opportunity to re-examine the specimens and to comment on subsequent literature could only have come in January 1850. It seems reasonable, therefore, to suppose that Valenciennes assisted initially in the determination of the fishes, but that Souleyet had the final word.

This is borne out by the fact that two of the fishes are named after Valenciennes (*Johnius valenciennii* and *Muraena valenciennii*), both of which are cited as "nobis". The species *Julius eydouxi* and *Julis souleyetii*, on the other hand, had already been published by Valenciennes in volume 13 of the *Histoire naturelle des poissons* of 1839. Furthermore, the authors are sometimes rather critical of the identifications of Valenciennes, accepting them reluctantly *(Mugil cephalotus)* or even firmly rejecting them, albeit with good grace (Murène catenulée becoming *Muraena valenciennii*). That Souleyet did not merely take the work of Valenciennes, but came back to the collection to re-examine the fishes, is shown by his statement (p. 197) that when he came to do so the specimens of his two new species of *Saurus* had disappeared, as also the holotype of *Stomias leucopterus* (p. 193). Equally significant is the fact that Valenciennes omitted these three species in the *Histoire naturelle des poissons* when he dealt with *Stomias* (volume 18 of 1846) and with *Saurus* (volume 22 of 1850). This not only gives a clue to the dating of the work (see below), but it also shows that either he did not know what Souleyet had included in the book, or he was tacitly acknowledging Souleyet's right to publish these names first.

We conclude, therefore, that Valenciennes assisted in the initial sorting and naming of the fish specimens, probably around 1838, but that thereafter Eydoux and later Souleyet on his own assumed responsibility for the text and saw the book through the press. The acknowledgment to Valenciennes cannot be taken at face value in view of the several occasions when the latter's judgement is questioned or even overruled. Thus, the fish names must be attributed to Eydoux & Souleyet.

DATING

The fishes described by Eydoux & Souleyet appeared in the first of the three volumes devoted to the zoology of the voyage. This first volume was divided into two parts .

Part 1

Title-page, authors Eydoux & Souleyet, dated 1841
Avant-propos, by Souleyet, dated November 1841, pp. I-IV
Instructions zoologiques, by de Blainville, pp. I-IX
Rapport, by de Blainville, dated 9 April 1838, pp, XI-XXXVII
Conclusion générale, by de Blainville, dated 28 May 1838, pp. XXXVIII-XXXIX
Mammifères, pp. 1-68
Oiseaux, pp. 69-106
Remarques zoologiques et anatomiques sur le Chionis, pp. 107-132

Part 2

Reptiles (Sauriens, Ophidiens et Batraciens), pp. 133-154
Poissons, pp. 155-216
Crustacés, pp. 216-272
Insectes, pp. 273-328
Table des Matières, pp. 329-334

The only attempt to date this work was by Sherborn & Woodward (1901 : 391), who gave 1841 for part 1 and 1842 for part 2. For part 2 they took as authority Wiegmann's *Archiv für Naturgeschichte* (1843 : 156), whose reviews of scientific literature by various "reporters" (Troschel for fishes) are a most useful source before Günther's *Zoological record* from 1865. In this case, however, the review is not a review at all, but a statement (under Insecta) that the book had not yet been seen : "Der zoologische Theil der Voyage autour du monde 1836-37 sur la corvette Bonite par M. Vaillant, Paris 1841-42 ist mir hier noch nicht zugänglich, weshalb ich den Berichte darüber verschiehen muss."

Searching later volumes of Wiegmann – and presumably Sherborn and Woodward did the same – we have found no reference to the zoology, and particularly to the fishes, in the years 1843-56. Gray (1855: preface), in a list of Eydoux & Souleyet's molluscs (some acquired by the British Museum), even states that the "text of the Zoological part of the "Voyage" has not yet been published" ; presumably, he was referring only to volume 2, although Sherborn & Woodward correctly date this as 1852 (on Wiegmann).

We have also searched the *Bibliographie de la France* for dates. Volume 1, part 1 of the zoology (pp. 1-132) was announced in n° 51 of the *Bibliographie* (published 18 December 1841). There is no reference to part 2 (pp. 133-334) in the *Bibliographie* between 1841 and 1859. We note, however, that failure to announce subsequent parts of a work was not unusual in those days.

Far more important, however, and apparently overlooked by all subsequent workers is a piece of internal evidence which shows conclusively that the section on fishes in part 2 could not have been published until at least six years after part 1. On p. 196 the authors cite *Chanos cyprinella* Valenciennes and they give a reference to volume 14 of the *Histoire naturelle des poissons,* p. 198. In fact, this is a printing error and the text gives the volume correctly as "le dix-neuvième", which was published in May 1847 (Bailey, 1951).

As noted already, Souleyet was absent from Paris from 1846 until January 1850. If the section on fishes was completed before his absence, then Valenciennes might not have been able to include *Stomias leucopterus* (instead proposing *S. fieldii),* since his volume 18 appeared in August or September 1846 and could thus have been in press when Souleyet left. But if the section on fishes was published at any time before Souleyet returned to Paris, then surely Valenciennes would have included the two new species of *Saurus (Saurida)* when he reviewed the Synodontidae in volume 22 of the *Histoire naturelle des poissons,* published in January 1850. The specimens, as Souleyet points out, were lost, but in a number of cases (e.g. *Stomias fieldii)* Valenciennes based his descriptions on those of others or on a drawing.

Yet another clue to the publication date is a footnote reference (p. 135) in the reptile section which mentions Gabriel Bibron's death (i.e. 27 March 1848). The reptiles come immediately before the fishes and the pagination is continuous (pp. 133-154 , then 155-216). Furthermore, the fish section was not printed separately, but is integrated into the 16-page gatherings of the preceding and succeeding sections (8 pages from reptiles and amphibians, fishes, 4 pages from crustaceans). This gives a firm date of post-March 1848 for the fishes.

Further clues to the dating of the Eydoux and Souleyet fish names come from an unpublished and undated revision of the tetraodontoid fishes by Bibron (MS n° 867, Bibliothèque Centrale of the Muséum National d'Histoire Naturelle). A summary of this revision, with some extracts and many new names, was later published by Duméril (1855), to whom it had apparently been entrusted by Bibron before his death in 1848. The revision was written, at least in part, by 1846 since Brisout de Barneville (1846 : 142) took from it and published the name *Diodon eydouxii*, a name attributed by Bibron to Souleyet and with reference (MS p.96) to "Voyage de la Bonite. Zool. p.   ". This must surely mean that Bibron saw an early draft of the zoology at some time before 1846. It is most curious, however, that *D. eydouxii* is not described by Eydoux & Souleyet, nor is it an earlier name for one of the species they did describe, in spite of the fact that the two specimens still exist (MNHN 2153). As pointed out by Leis (1978 : 543), the name must be attributed to Brisout de Barneville. Equally curious is the fact that a second Bibron species, *Cataphorhynchus longipinnis*, is based on the same specimen that Eydoux & Souleyet named *Tetraodon scaber*. Souleyet must surely have known of Bibron's work before he left Paris in 1846 ; while Bibron was clearly aware of Souleyet's intentions since, a least by implications, he took the name *eydouxii* from Souleyet's notes or draft of the zoology. Bibron was still working on his revision in the year before his death, when he reviewed the Temminck & Schlegel species published in June 1847 (see Appendix 1 for dating). One can only suppose that when Souleyet returned to Paris in January 1850, Bibron's manuscript and the specimens of *Diodon eydouxii* were for some reason not available to him or were not drawn to his attention by Valenciennes Whatever the true explanation, the facts are not inconsistent with our view that Souleyet did not complete the zoology until after his return to Paris. Bibron's manuscript was donated to the Museum by his widow in 1855 (Procès Verbal de la Séance, 3 July 1855).

We conclude, therefore, that the fish names in Eydoux & Souleyet's zoology of *La Bonite* were published after March 1848 and most likely at about the same time as volume 22 of the *Histoire naturelle des poissons* of Valenciennes, thus in the early part of 1850. This would explain why Souleyet could not give an exact reference to Valenciennes' volume, and perhaps why Valenciennes did not use Souleyet's species of *Saurus (Saurida)*.

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For the present, however, to bring the dating of the fish names forward even from 1841 to March 1848 is effectively to "leap-frog" many of the important ichthyological works of that period, thus restoring priority to names proposed in the interim by Temminck & Schlegel, Richardson, Bleeker and others. We note, for example, that *Pristipoma mucronata* Eydoux & Souleyet is now predated by Richardson's *Hapalogenys analis* of 1846 (if the two are indeed synonyms). Most of the contending works are fairly securely dated, but there is still some confusion over Temminck & Schlegel's *Fauna japonica* and over Richardson's *Erebus & Terror, Sulphur* and *Report on the ichthyology of the seas of China and Japan* We have summarized what is known of their dating, together with that of the relevant volumes of the *Histoire naturelle des poissons,* in Appendix 1.

EYDOUX & SOULEYET'S NEW SPECIES

ASTRONESTHIDAE
- *Stomias leucopterus* (p. 193, pl. 7(4) - Atlantic Ocean)

GYMNOTIDAE
- *Carapus arenatus* (p. 210, pl. 8 (2) - Guayaquil river, Ecuador)

SYNODONTIDAE
- *Saurux* (sic) *ferox* (p. 197, pl. 7 (2) - no locality)
- *Saurus limbatus* (p. 198, pl. 7(3) - no locality)

MURAENIDAE
- *Muraena valenciennii* (p.207, pl. 8 (1) - Sandwich Is.)

CONGRIDAE
- [*Conger marginatus* (p. 201, pl. 9(1) - Sandwich Is. ; this name must be attributed to Valenciennes]
- *Conger oxyrhynchus* (p. 203, pl. 9(2) - Macao)
- *Conger microstoma* (p. 205, pl. 9 (3) - Macao)

SCIAENIDAE
- *Johnius valenciennii* (p. 159, pl. 1(2) - near Macao)

POMADASYIDAE
- *Pristipoma mucronata* (p. 161, pl. 2(1) - Macao)

CARANGIDAE
- *Caranx pinnulatus* (p. 165, pl. 3(1) - Sandwich Is.)
- *Caranx stellatus* (p. 167, pl. 3(2) - Sandwich Is.)

GOBIIDAE
- *Oxuderces* (p. 181)
- *Oxuderces dentatus* (p. 182, pl. 8(2) - Macao)
- *Gobius grandinosus* (p. 177, pl. 5(4) - Macao)
- *Gobius stamineus* (p. 179, pl. 5(5) - Sandwich Is.)

MUGILIDAE
- *Mugil chaptalii* (p. 171, pl.4 (1) - Sandwich Is.)
- *Mugil lauvergnii* (p. 174, pl. 4(3) - Macao)

TETRAODONTIDAE
- *Tetraodon scaber* (p. 214, pl. 10(1) - Macao)
- *Tetraodon pantherinus* (p. 215, pl.10 (3) - Macao)

ANTENNARIIDAE
- *Chironectes barbatulus* (p. 184, pl. 5(1) - no locality)
- *Chironectes recticulatus* (p. 186, pl. 5(2) - Sandwich Is.)
- *Chironectes leprosus* (p. 187, pl. 5(3) - Sandwich Is.)

Of these 21 new species, the types of *Stomias leucopterus* and of the two species of *Saurus* were already missing when Souleyet returned to the collection ; we have not been able to locate them The remaining types are all present except those of *Tetraodon pantherinus,* which are not given in the old catalogues and seem to have been missing for a long time. Eydoux & Souleyet give descriptions and figures of 11 other species, and specimens of all these have been located. A complete list of the *La Bonite* fishes, described by Eydoux & Souleyet, is given in Appendix 2.

It is curious that relatively few of the fishes brought back from the voyage were actually described, since 291 specimens were registered. The death of Eydoux in the Antilles in 1841 and Souleyet's new duties and his tours overseas in 1846-50 perhaps explain how an initially large and ambitious project became whittled down until only those species were described for which a plate had been engraved and coloured. We find that in fact these 32 species were entered into the register together, between June 1851 and December 1852. The remaining species were entered much later and in an irregular fashion, without any preliminary indication of the year.

THE PLATES

There are 10 plates illustrating all 32 species mentioned in the text, drawn by P. Oudart and coloured in at least some copies (e.g. British Museum (Natural History) and Bibliothèque Centrale of the Muséum National d'Histoire Naturelle). They appear to have been based on the actual specimens, presumably with colour sketches made on the voyage. All are undated, but they are not relevant to the dating of the new names since all are captioned with a vernacular name. The names were certainly inscribed on the plates before the text was finalized since Murène catenulée of Schneider becomes *Muraena valenciennii* nobis in the text. Again, Chanos oriental Val. of pl. 7 (2) becomes *Chanos cyprinella* in the text, a name proposed by Valenciennes in volume 19, thus implying that the plates were inscribed before May 1847. This might explain why Souleyet states (footnote, p. 157) that all the species "figurées sur nos planches" were determined by Valenciennes. At the beginning of the Atlas is an 8-page list of all the plates, but again only vernacular names are used.

The original drawings for the plates are in the Bibliothèque Centrale. We note that plates 1, 3, 5 and 10 bear the signature of Eydoux ; plate 2 has a note "Vu. A.V." (i.e. seen by Valenciennes) ; plates 4, 7 and 9 have "Vu, bon à graver" and are signed by Valenciennes ; and plate 6 has the signature of both Valenciennes and Souleyet. In addition, the plates for snakes, lizards and amphibians that precede the fish plates often have Eydoux' signature, whereas those after the fishes (i.e. crustaceans, insects) have Souleyet's signature. This confirms the extent to which Eydoux was able to contribute before leaving for Martinique in 1841. It also confirms that Valenciennes played an important role at the beginning of the work.

CONCLUSION

The fishes from the voyage of *La Bonite* (1836-37) were described by Eydoux & Souleyet and not by Valenciennes ; the only exception is *Conger marginatus*, which they themselves attribute to Valenciennes in both the text and the plate. The fish names are usually dated 1841 or 1842, but reference in the text to volume

19 of the *Histoire Naturelle des Poissons* and to Bibron's death proves that publication was post-March 1848 ; there is some evidence that the work was not published until 1850. The dates of the parts of Temminck & Schlegel's *Fauna japonica* and of certain works by Richardson are tabulated since they may contain fish names that would now have priority over those of Eydoux & Souleyet. The fish species from Eydoux & Souleyet are catalogued ; the types of 17 of their species, and that of *Conger marginatus,* have been located, but those of four other species are lost ; specimens of the 10 other species mentioned have also been located.

ACKNOWLEDGEMENTS

For invaluable help in our search for archival and other material, we express our warm thanks to Mr Yves Laissus, Conservateur en Chef of the Bibliothèque Centrale of the Muséum national d'Histoire naturelle

APPENDIX 1

The dating of works by Richardson, Temminck & Schlegel and Valenciennes, some of whose fish names may now have priority over those of Eydoux & Souleyet.

RICHARDSON

Erebus & Terror (dates from CLOFNAM, *2* : 127 - see Hureau & Monod, 1973)

pp. 1-16 (1844)
pp. 17-52 (1845)
pp. 53-74 (1846)
pp. i-viii + 75-139 (1848)

Sulphur

Part 1, pp. 1-50 (1 April 1844 *fide* note in Part 2, p.86)
Part 2, pp. 51-86 (no information)
Part 3, pp. 87-150 (as 26 August 1845 at end of book, but as October 1845 in Richardson's *Report,* p. 316)

Report on the ichthyology of the seas of China and Japan

"Haslar Hospital, April 1846" (on last page)

p. 272, this sheet in press and Part 9 of *Fauna japonica* seen, i.e. after 1 May 1846

p. 316, seventh sheet in press and Part 10 of *Fauna japonica* seen, i.e. again after 1 May 1846 ; as a result, Richardson was able to make corrections to his text on pp. 194-215, 258 and 311.

Conclusion : the *Report* appeared after Parts 9-10 of the *Fauna japonica* (1 May 1846), but before Part 11 (26 August 1846). For the moment, it can only be dated June/July 1846.

TEMMINCK & SCHLEGEL'S *Fauna japonica*

Partial dating given by Esaki (1935), Mees (1962) and Akihito (1966).

We have supplied the missing page numbers (in italics) on the assumption that the parts were of twenty pages.

Part	Pages	Date
1	1-20	11 February 1843
2-4	21-72	19 March 1844
5-6	73-112	18 December 1844
7	113-132	11 October 1845
8	133-152	same
9	153-172	1 May 1846
10	173-188	same
11	189-*205*	26 August 1846
12	*206-226*	same
13	*227-247*	22 November 1846
14	*248*-268	12 January 1847
15	269-*289*	26 June 1847
16	*290*-324	19 July 1850

VALENCIENNES *Histoire Naturelle des Poissons*

Dating by Bailey (1951)

Volume	Date
16	August 1842
17	July 1844
18	August or September 1846
19	May 1847
20	November 1847
21	September 1848
22	January 1850

APPENDIX 2

The fishes from the voyage of *La Bonite,* deposited in the Muséum National d'Histoire Naturelle and described by Eydoux & Souleyet.

ASTRONESTHIDAE

Stomias leucopterus nobis (p. 193, pl. 7 (4), as Stomias leucoptère Eydoux et Souleyet, Atlantic Ocean).

Specimen already missing when Souleyet came to re-examine the material (le seul individu que nous possédions s'est trouvé égaré dans les galeries du Muséum lorsque nous avons voulu le revoir pour faire la description). *Stomias leucopterus* no longer has a two year priority over *Astronesthes nigra* Richardson, 1844, which is a senior synonym of *Stomias fieldii* Valenciennes, 1846 (Gibbs & Morrow, 1973 : 126 - who do not mention *S. leucopterus,* however).

GYMNOTIDAE

Carapus arenatus nobis (p. 210, pl.8 (2), as Carape sablé Eydoux et Souleyet, Rivière Guayaquil).

2 fishes, 600, 720 mm TL, Rivière Guayaquil (Ecuador), MNHN 3809 (in spirit), SYNTYPES = *Sternopygus macrurus* (Bloch & Schneider, 1801) *fide* Bertin (1948), who gave the name in error as *Carapus auratus.*

SYNODONTIDAE

Saurux (sic) ***ferox*** nobis (p.197, pl. 7 (2 - not 3 as in text), as Le Saurus féroce Val., no locality).

Specimen already missing when Souleyet came to re-examine the material (nous ne pouvons donner les dimensions de cette espèce, ni indiquer la localité d'où elle provient...

[les] individus ... n'ont pas été retrouvés dans les galeries du Muséum).

Saurus limbatus nobis (p. 199, pl. 7 (3), as Le Saurus galonné Eydoux et Souleyet, no locality).

No specimen (see remarks for preceding species).

MURAENIDAE

Muraena valenciennii nobis (p. 207, pl. 8 (1), as Murène catenulée Schn., Sandwich Is., i.e. Hawaii).

1 fish, 670 mm TL, Sandwich Is., MNHN 487 (in spirit), HOLOTYPE = *Gymnothorax undulatus* (Lacepède, 1803).

CONGRIDAE

Conger marginatus Valenciennes (p. 201, pl. 9 (1), as Le Congre bordé Val., Sandwich Is.).

1 fish, 715 mm SL and 755 mm TL, Sandwich Is., MNHN 2152 (in spirit), HOLOTYPE = *Conger conger* (Linnaeus, 1758).

The name *C. marginatus* must be attributed to Valenciennes in Eydoux & Souleyet, post-1848.

Conger oxyrhynchus nobis (p. 203, pl. 9 (2), as Le Congre oxyrhynque Eydoux et Souleyet, Macao).

1 fish, 582 mm SL and 592 mm TL, Macao, MNHN 8454 (in spirit), HOLOTYPE. Described as *Muraenesox bagio* by Kaup, 1856 : 117 = *Muraenesox cinereus* Forsskal, 1775) *fide* Herre, 1953.

Conger microstoma nobis (p.205, pl.9 (3), as Le Congre petite bouche Eydoux et Souleyet, Macao).

1 fish, 900 mm TL, Macao, MNHN B.2736 (in spirit), HOLOTYPE. Mentioned by Kaup, 1856 : 17 as *Pisodonophis boro* = *Pisodonophis sp. fide* Blache, 1975.

CHANIDAE

Chanos cyprinella Valenciennes (p. 196, pl. 7 (1), as Chanos oriental Val., Sandwich Is.).

1 fish, 241 mm SL and 340 mm TL, Sandwich Is., MNHN 3624 (in spirit), HOLOTYPE= *Chanos chanos* Forsskal, 1775).

The species was proposed by Valenciennes (1847 : 198) on the basis of this Eydoux & Souleyet specimen, said to come from the "port d'Onorourou" in the Sandwich Islands.

SCIAENIDAE

Johnius valenciennii nobis (p. 159, pl. 1 (2), as Johnius de Valenciennes Eydoux et Souleyet, near Macao).

1 fish, 332 mm SL and about 400 mm TL, Mer de Chine aux environs de Macao, MNHN 7623 (in spirit), HOLOTYPE = *Protonibea diacanthus* (Lacepède, 1802) *fide* Trewavas (1977).

POMADASYIDAE

Pristipoma mucronata nobis (p. 161, pl. 2 (1), as Le Pristipome mucroné Eydoux et Souleyet, Macao).

1 fish, 160 mm SL and 196 mm TL, Macao, Chine, MNHN 7702 (in spirit), HOLOTYPE =*Hapalogenys analis* Richardson, 1846, which is apparently now a senior synonym of *Hapalogenys mucronatus* (Eydoux & Souleyet , post-1848).

CARANGIDAE

Caranx pinnulatus nobis (p. 165, pl. 3 (1), as Le Caranx pinnulé Eydoux et Souleyet, Sandwich Is.).

2 fishes, 195, 197 mm SL, 204, 208 mm FL, and 227, 229 mm TL, Sandwich Is., MNHN 5851 (in spirit), SYNTYPES = *Decapterus macarellus* (Cuvier, 1833) *fide* Smith-Vaniz *et alii* (1979 : 16).

Caranx stellatus nobis (p. 167, pl. 3 (2), as Le Carangue étoilée (sic) Eydoux et Souleyet, Sandwich Is.).

1 fish, 333 mm SL, 350 mm FL and 406 mm TL, Sandwich Is., MNHN A.6068 (in spirit), HOLOTYPE = *Caranx melampygus* Cuvier, 1833 *fide* Smith-Vaniz *et alii* (1979 : 19).

CHAETODONTIDAE

Chaetodon miliaris Quoy et Gaimard (p. 163, pl. 2 (2), as Le Chétodon miliaire, Quoy, Sandwich Is.).

3 fishes, 59, 75, 93 mm SL and 71, 90, 114 mm TL, Sandwich Is., MNHN 9916 (in spirit) = *Chaetodon miliaris* Quoy & Gaimard, 1825.

ACANTHURIDAE

Acanthurus humeralis Valenciennes (p. 169, pl. 2 (3), as l'Acanthure huméral Forster, Sandwich Is.).

1 fish, 160 mm SL and 217 mm TL, Sandwich Is., MNHN A.7031 (in spirit) = *Acanthurus olivaceus* (Bloch & Schneider, 1801).

The authors state that "c'est par erreur que cette espèce se trouve rapportée à Forster sur notre planche". The name *Acanthurus humeralis* was proposed by Valenciennes (1825 : 231), thus before this specimen reached the Museum.

LABRIDAE

Julis eydouxi Valenciennes (p. 189, pl. 6 (1), as La Girelle de Eydoux Val., Sandwich Is.)

3 specimens, 122, 167, 174 mm SL and 147, 203, 209 mm TL, Sandwich Is., MNHN A. 9279 (in spirit), SYNTYPES = *Coris flavovittata* (Bennett, 1829) *fide* Bauchot (1963 : 54).

The name *Julis eydouxi* was proposed by Valenciennes (1839 : 455) thus volume 13, not 12 as indicated by Eydoux & Souleyet.

Julis souleyetii Valenciennes (p. 190, pl. 6 (2), as La Girelle de Souleyet Val., Sandwich Is.).

2 fishes, 105, 114 mm SL and 127, 140 mm TL, Sandwich Is., MNHN A.9172 (in spirit), SYNTYPES = *Thalassoma umbrostygma* (Rüppell, 1835) *fide* Bauchot (1963 : 69). The name *Julis souleyetii* was proposed by Valenciennes (1839 : 457), thus volume 13, not 12 as indicated by Eydoux & Souleyet ; the exact locality is given by Valenciennes as "cascade d'Ouaou", but the species was also based on 2 Quoy & Gaimard specimens and a specimen from Mauritius (the latter fish not found by Bauchot, *loc. cit.).*

SCARIDAE

Scarus formosus Valenciennes (p. 191, pl. 6 (3), as Le Scare élégant Val., Sandwich Is.).

2 fishes, 153, 160 mm SL and 188, 199 mm TL, Sandwich Is., MNHN 585 (in spirit), SYNTYPES = *Scarus dubius* Bennett, 1828 fide Randall & Choat (1980 : 387) who designated the smaller as LECTOTYPE of *Scarus formosus* Valenciennes, 1840.

GOBIIDAE

Gobius grandinosus nobis (p. 177, pl. 5 (4), as Gobie grelé Eydoux et Souleyet, Macao).

1 fish, 96 mm SL and 123 mm TL, Mers de la Chine à Macao, MNHN A.1366 (in spirit), HOLOTYPE = *Acentrogobius caninus* (Valenciennes, 1837) *fide* Hoese (1976).

Gobius stamineus nobis (p. 179, pl. 5 (5), as Gobie à filet Eydoux et Souleyet, Sandwich Is.).

1 fish, 108 mm SL and 136 mm TL, Sandwich Is., MNHN A.1133 (in spirit), HOLOTYPE = *Chonophorus stamineus* (Eydoux & Souleyet, post-1848).

Oxuderces dentatus nobis (p. 182, pl. 8 (3), as Oxuderces denté Eydoux et Souleyet, Macao).

1 fish, 76 mm SL and 91 mm TL, Macao, MNHN A.1822 (in spirit), HOLOTYPE = *Oxuderces dentatus* Eydoux & Souleyet, post-1848 *fide* Springer (1978), who followed Jordan (1919) in dating the name from 1842, but correctly gave Eydoux & Souleyet authorship.

MUGILIDAE

Mugil chaptalii nobis (p. 171, pl. 4 (1), as Muge de Chaptal Eydoux et Souleyet, Sandwich Is.).

1 fish, 93 mm SL and 115 mm TL (caudal broken, but TL given by Blanc & Hureau, 1972), Sandwich Is., MNHN 8100 (in spirit), "HOLOTYPE" = *Neomyxus chaptalii* (Eydoux & Souleyet, post-1848) *fide* Blanc & Hureau *(loc. cit.* : 685), or ? *M. cephalus* Linnaeus, 1758.

There are ten further specimens, omitted by Blanc & Hureau from their type catalogue, which we consider to be syntypes since they were collected at the same time.

5 fishes, 51, 53, 56, 57, 66 mm SL and 63, 67, 70, 71, 85 mm TL, Sandwich Is., MNHN A. 3763 (in spirit), SYNTYPES.

5 fishes, 55, 60, 65, 74, 85 mm and 70, ?, 81, 92, 107 mm TL, Sandwich Is., MNHN A. 3765 (in spirit), SYNTYPES.

Mugil corsula Buchanan (p. 172, pl. 4 (2), as Muge corsula Buchanan, Ganges).

1 fish, 153 mm SL and 186 mm TL, Ganges, MNHN A.3740 (in spirit) - *Rhinomugil squamipinnis* (Swainson, 1820).

Mugil lauvergnii nobis (p. 174, pl. 4 (3), as Muge de Lauvergne Eydoux et Souleyet, Macao).

1 fish, 180 mm SL and 219 mm TL, Mer de Chine (Macao), MNHN 8138 (in spirit) HOLOTYPE = *Liza haematocheilus* (Temminck & Schlegel, 1845).

Mugil cephalotus Valenciennes (p. 175, pl. 4 (4), as Muge céphalote Val., Sandwich Is.).

2 fishes, 243, 252 mm SL and 309, 320 mm TL, Sandwich Is., MNHN 8101, (in spirit) = *Mugil cephalus* Linnaeus, 1758. The reference to Valenciennes should be volume 11, not volume 2.

HOPLICHTHYIDAE

Oplichthys langsdorfii Cuv. Val. (p. 157, pl. 1 (1A), as Oplichthe de Langsdorff Cuv. et Val., Macao).

1 fish, 155 mm SL and 172 mm TL, Mer de Chine à Macao, MNHN 6906 (in spirit) = *Hoplichthys langsdorffii* Cuvier, 1829.

The Atlas figure is natural size and "de manière plus exacte" than that given by Cuvier in the *Histoire Naturelle des Poissons* (volume 4 : 264, pl. 81), which was based on a Langsdorff specimen from Japan.

Cuvier gave the name as *Oplichthys* in the text, but *Hoplichthys* in the table of contents (p. XIX). The name comes from the Greek οπλον and ιχθυς , and is thus correctly written *Hoplichthys.*

TETRAODONTIDAE

Tetraodon stellatus Lacepède (p.212, pl. 10 (2), as Tétrodon étoilé Lacepède, Sandwich Is.).

1 fish, 280 mm SL and 335 mm TL, Sandwich Is., MNHN 3542 (in spirit), HOLOTYPE = *Ovoides hispidus* (Linnaeus, 1758).

Tetraodon scaber nobis (p. 214, pl. 10 (1), as Tétrodon à bosse Eydoux et Souleyet, Macao).

1 fish, 71 mm SL and 90 mm TL, Macao, MNHN 2178 (in spirit), HOLOTYPE = *Tetraodon immaculatus* (Bloch & Schneider, 1801) ; given as *Catophororhynchus (sic) scaber* by Le Danois (1961).

In the original description, the specimen is given as "11 cm environ", but possibly this was taken from the plate, which would thus be a little over life size ; no other specimen is known. Also type of *Catophorhynchus longispinnis* Duméril, 1855, a *nomen nudum* cited from Bibron's "Monographie inédite des Diodoniens" (MNHN Library, MS n° 867).

Tetraodon pantherinus nobis (p. 215, pl. 10 (3), as Tétrodon panthère Eydoux et Souleyet, Macao).

No specimen found.

[*Diodon eydouxi* Brisout de Barneville, 1846. This species was not described by Eydoux & Souleyet, *pace* Le Danois (1961 - who followed Duméril (1855), who in turn had found the name in Bibron's manuscript, as in the case of *T. scaber* above). The name *Diodon eydouxi* is correctly attributed to Brisout de Barneville, as pointed out by Leis (1978 : 543). The two syntypes (MNHN 2153) were from between Gayaquil and Hawaii.]

ANTENNARIIDAE

Chironectes barbatulatus nobis (p. 184, pl. 5 (1), as Chironecte barbatule Eydoux et Souleyet, no locality).

1 fish, 90 mm TL, "nous ne pouvons indiquer la localité d'où il provient" (thus no locality on bottle or in catalogue), MNHN A.4596 (in spirit), HOLOTYPE = *Histrio histrio* (Linnaeus, 1758) *fide* Pietsch (1979).

Chironectes reticulatus nobis (p. 186, pl. 5 (2) as Chironecte à réseau Eydoux et Souleyet, Sandwich Is.).

1 fish, 40 mm TL, Sandwich Is., MNHN A.4616 (in spirit), HOLOTYPE = *Antennarius bigibbus* (Latreille, 1804), *fide* Pietsch (1979).

Chironectes leprosus nobis (p. 187, pl. 5 (3), as Chironecte lépreux Eydoux et Souleyet, Sandwich Is.).

1 fish, 118 mm TL, Sandwich Is., MNHN A.4595 (in spirit), HOLOTYPE = *Antennarius pictus* (Shaw, 1794) *fide* Pietsch (1979).

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